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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,420	04/01/2004	Hwail Jin	3083.EEM	7683

7590 12/08/2005

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EXAMINER

ZIRKER, DANIEL R

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,420

Applicant(s)

JIN, HWAIL

Examiner

Daniel Zirker

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/1/04</u> . | 6) <input type="checkbox"/> Other: ____. |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, the specification clearly teaches (e.g. page 1, line 1, page 11, lines 3-4) that the claimed dicing die bonding film is formed from two laminated adhesive layers, but such a structure is nowhere positively set forth in applicant's claims. In claim 1, lines 3 and 5 the phrases "which comes in contact" appear to be some form of contemplated method of usage for each of the layers, but in an article claim such as claim 1 they are confusing, as applicant's claim reads on two adhesive layers that appears to only need to be connected together in some as yet unsaid manner. In claims 4 and 5 it is unclear how each of the disclosed adhesive compositions can contain up to 80 wt % filler since the minimum amount of thermoplastic rubber which must be present is 30 wt % (also 15 wt % thermoset resin must be available; it should also be stated that this is also a 112, 1st paragraph rejection). Finally, each of claims 5-8 appears that it should be dependent on either claim 3 or 4 since the ingredient referred to (e.g. thermoset resin) in each of these claims is not found in claim 1.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akada et al. The reference discloses (note particularly the Abstract, Fig 1, Col 1, lines 14-32, line 66 – Col 2, line 26, lines 48-54, Col 3, lines 7-33, Col 4, line 17 – Col 5, line 7, Examples) a dicing die bonding film which is formed of two adhesive layers (one being a partially cured UV pressure sensitive adhesive) suitable for use in supporting semiconductor wafers during dicing together with release properties for enabling the cut chips to be easily released. The adhesives utilized appear to be quite similar to those utilized by applicant and can include (Col 4, lines 38-47) mixtures of thermoplastic and thermosetting adhesives. With respect to the performance parameter relating to the differences in adhesion set forth in the last two lines of claim 1 this is believed to be, if not inherent, at most an obvious optimization of bonding properties in the same or substantially similar environments. With respect to dependent claims 5 and 6 the reference teaches that epoxies can be utilized and the compositions set forth therein are also believed to be within the skill of the art and the remaining dependent claims are also believed to involve well known adhesive elements such as hardeners, accelerators and fillers (claims 3,4, 7-9) or various mixtures and thermoplastic rubbers that are well within the ordinary skill of the art, in the absence of unexpected results.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note also the corresponding PGPub for this application to inventor Jin and US 2005/0046042 A1 to Matsummura et al.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Zirker whose telephone number is 571-272-1486. The examiner can normally be reached on Monday-Thursday from 8:30 to 6:00. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Zirker
Primary Examiner
Art Unit 1771

A handwritten signature in black ink that reads "Daniel Zirker". The signature is written in a cursive, flowing style.